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ABSTRACT

A group of 11 experienced junior high school teachers, identified as having problems with classroom management, received materials and workshops based on findings from a large-scale descriptive study of classroom management. Observation data from two classes per teacher were used to assess the level of implementation by treatment group teachers. Results indicated that, as a group, the teachers who received the treatment did not use the recommended strategies significantly more than did the control group teachers. Interview data identified possible reasons for these findings. Because of the small sample size, the power of statistical tests to detect differences between the groups was weak. A survey of teachers' individual scores indicated this was not a homogeneous group of "poor managers"; several teachers evidenced few management problems. The presentation mode for management information was inappropriate for this group; no specific feedback was given. The teachers may not have perceived a match between their needs and research suggestions. Most of the rules, procedures, instructional plans, and materials were ones that the teachers had used before, and the teachers may have felt defensive after having been recommended by their principals as being among those who would find the materials useful. Seven detailed tables display report data. (Author/JD)

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# Helping Experienced Teachers with Classroom Management: An Experimental Study

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For a number of years, researchers have been trying to identify factors which contribute to effectiveness of inservice teacher training. Among the factors affecting implementation of recommended teaching practices are: teacher characteristics (e.g., teacher attitudes, concerns, and skills), context (e.g., principal leadership style and school policies), training strategies (e.g., in-service activities and amount of time in training), and characteristics of recommended practices (e.g., whether new skills are to be learned or present skills "fine-tuned"). Fullan and Pomfret (1977) distinguished between internal (teacher level) and external (organizational level) dimensions and determinants of change in teacher behavior. Hall and associates studied the role of teacher concerns on innovation implementation (Hall, 1979; Hall & Loucks, 1981). A number of studies (Bentzen, 1974; Hord, Thurber, & Hall, 1981; Little, Note 1) have focused on the importance of the supportive context for teacher change. Other studies (see review by Joyce & Showers, 1980) have identified training components that promote implementation. Doyle and Ponder (1977) suggested several determinants of "practicality" that have an impact on how teachers react to change recommendations.

Several teaching effectiveness field experiments in which research findings were translated into guidelines for teachers practice have taken into consideration at least some of the teacher training effectiveness factors that have been mentioned. Studies by Anderson, Evertson, and Brophy (1979), Good and Grouws (1979), Stallings, Needels, and Stayrook (Note 2), Crawford, Gage, Corno, Stayrook, Mitman, Schunk, Stallings, Baskin, Harvey, Austin, Cronin, and Newman (Note 3), and Emmer, Sanford, Evertson, Clements, and Martin (Note 4), provided

teachers with training and then assessed level of implementation in classrooms. All of these studies found that recommendations that are clear, specific, and practical, and philosophically acceptable to the teachers could be implemented by teachers even with a minimal amount of training.

The relative stability of public school faculties in recent years has brought about an increased interest in providing teachers with in-service training aimed at improving already existing skills and strategies or correcting instructional deficiencies. Classroom management is one area of concern reported by both experienced and inexperienced teachers and administrators. It is an area which has been shown by recent research to be a very important component of effective teaching and related to pupil achievement (Brophy, 1979; Medley, 1977; Rosenshine, Note 5). This paper presents the results of a field experiment in which a group of experienced teachers identified as needing help with classroom management received materials and workshops based on findings from a large scale descriptive study of classroom management in junior high schools (Evertson & Emmer, 1982). The experienced teachers were a subsample of the teachers participating in the Junior High Classroom Management Improvement Study (JMIS) (Emmer, Sanford, Clements, & Martin, Note 6). The JMIS investigated the extent to which teachers, provided at the beginning of school with a manual and two workshops describing effective management behaviors, would implement the recommended behaviors, and it assessed the effects of implementation on students' behavior. Most of the 61 teachers in the JMIS were relatively inexperienced, and effects of the training on these inexperienced teachers was the major focus of the study. A group of 11

more experienced teachers was included in the JMIS to explore the problems that might be associated with providing effective remedial training in classroom management, using a limited training strategy.

## Methods and Data Source

Teachers who participated in the JMIS taught in two urban school districts in two southwestern cities. At the request of school administrators in one of the cities, it was decided to include a subsample of experienced teachers. Principals were invited to nominate experienced teachers who could benefit from help in classroom management.

Recruitment of teachers took place during the 2 weeks prior to the beginning of the school year. Teachers were contacted by telephone and all relevant details of the study were explained by a staff member. Teachers in the experienced-management problem group were told that they had been recommended by their principals as being teachers who might find the management materials useful and who might be willing to participate in the study. Of the 15 experienced teachers contacted, 13 volunteered to participate.

All teachers in the final JMIS sample were divided into treatment and control groups using a system of stratified random sampling, balancing for subject taught and years of experience. Because of the desire to avoid classes with team teaching or other unusual circumstances, only 11 of the 13 volunteering experienced teachers were included in the final sample, six in the experimental group and five in the control group. The teachers in this subsample had a range of prior teaching experience of from 3 to 25 years, and came from seven ethnically/racially mixed junior high schools. The subsample included

three math teachers, three English teachers, two social studies teachers, two science teachers, and one reading teacher.

There was no difference in the treatment of the main group (inexperienced) teachers and the experienced-management problem group teachers. The major component of the JMIS treatment was teachers' use of the manual, Organizing and Managing the Junior High Classroom (Emmer, Evertson, Sanford, Clements, & Worsham, Note 7), which was based on previous research done by the project. The manual is organized around nine chapters on classroom organization and management. The first four chapters focus on planning a good system of management at the beginning of the school year. The next three chapters focus on establishing and maintaining a well managed classroom, and the last two chapters focus on instructional management. Each chapter contains guidelines and rationale for effective management practices. Case studies taken from actual classrooms are included as examples of the practices and there are checklists to help teachers use the information.

During inservice days prior to the beginning of school, treatment group teachers attended a half-day workshop where they received the manual. Workshop activities focused on explaining the project more fully, describing the research base for the manual, and introducing the teachers to all parts of the manual. Structured activities which encouraged interaction among the teachers were included.

After 3 weeks of school, treatment group teachers attended a second half-day "booster" workshop. The purposes of this workshop were to refocus the attention of the teachers on parts of the manual that would be useful throughout the remainder of the school year and to enable teachers to discuss management problems with other teachers and research

project staff members. Included in this workshop were small group discussions of brief case studies illustrating management problems sometimes seen in classrooms. At the end of this workshop, teachers were asked to complete a questionnaire indicating how useful they had found the various manual chapters and how much they had read and studied each chapter. Treatment group teachers were also asked to complete this questionnaire at the end of the study. The teachers in the control group did not receive the management manual or the workshops until observations were completed in March.

Two classes of all teachers, both treatment and control, were observed to assess the effects of training on treatment teachers' management behaviors. One class of each teacher was observed on the first day of the school year, and approximately 10 additional times in the first 8 weeks of school. Another class for each teacher was observed approximately seven times in the first 8 weeks of school. In January and February, four additional observations were made of each class for a total of eight observations per teacher in this period. Observations lasted for the entire class period, which averaged 55 minutes in length.

Classroom observations were conducted by 20 observers, most of whom had classroom teaching or research experience. Training activities included reliability checks, practice with videotapes of classroom instruction, and other types of practice exercises.

A number of different types of data were collected. During each observation, observers wrote a description of classroom activities and behavior on the narrative record form. Preserved in this record was the sequence of activities, the amount of time spent in each activity, and

the behaviors of the teacher and students. Beginning at a randomly determined time during the first 10 minutes of class and thereafter every 10 minutes, observers stopped taking notes for the narrative record and completed a Student Engagement Rating. On the SER form, the observer recorded the number of students engaged in academic or procedural activities or those who were off task or in dead time. SER counts were later converted to proportions and averaged across each observation. After each observation, observers completed a set of Likert type ratings called Component Ratings in which they assessed student task-orientation, inappropriate and disruptive student behavior, and a variety of teacher management behaviors. At the end of the first eight weeks of school and again after the mid-year observations, observers completed a set of summary, Likert type ratings of teacher behaviors (Observer Ratings of Teachers). Additional information was obtained from teacher interviews and questionnaires and from ratings completed by readers of the narrative sets.

## Results

In order to address the question of whether the management training materials and workshops were effective for the group of experienced-management problem teachers, measures were taken from four different instruments: Component Ratings (CRs), Addendum Component Ratings (ADCRs) completed during the first week of school only, Observer Ratings of Teachers (ORTs), and Narrative Reader Ratings (NRRs). These instruments provided evidence of teachers' use of the management behaviors recommended in the manual. For the Component Ratings, statistical tests were conducted to determine whether treatment teachers exhibited more of the behaviors than control teachers, using a repeated

measures analysis of variance. Treatment-control group membership was the between-group independent variable and observation time period (Week 1, Weeks 2-4, Weeks 5-8, January-February) was the repeated measures independent variable. Previous research had shown that the first week of school was different from the following weeks. In addition, a check on persistance of effects over time was desired, as well as evidence of Group X Treatment interactions. Results for all the CR variables are reported in Table 1.

Observer Ratings of Teachers were also analyzed using a repeated measures analysis of variance, with group membership as one independent variable and time (after Week 8 and after February) as the other independent variable. Results for the ORT variables are reported in Table 2.

Student Engagement Ratings (SERs) (and three variables from the Component Ratings instrument: amount of inappropriate behavior, amount of disruptive behavior, and student task-orientation) were used as a measure of management effectiveness. These variables were also analyzed with a repeated measures analysis of variance, with group membership as one independent variable and observation time period as a second repeated measures independent variable. Again there were four time periods: Week 1, Weeks 2-4, Weeks 5-8, and January-February. Results are shown in Table 3.

In general, for the subsample of experienced teachers with management problems no significant results were found in either teacher or student behavior variables. It would appear that as a group the experienced teachers who received the classroom management manual and workshops did not use the suggested strategies and behaviors

significantly more than the experienced teachers who did not receive the training. Neither did they have significantly higher levels of student task engagement or appropriate student behavior. As a group, there were a number of significant time effects indicating that experienced-management problem teachers experienced increasing levels of management problems as the year progressed. Because of the relatively few interactions, it appears that this trend across the year was equally true for treatment and control group teachers.

The small sample size used to test the hypothesis makes these significance tests very low in power. In an attempt to discover differences between the treatment and control groups that, while small, were consistent with the significant differences that were found with the main group of inexperienced teachers, a comparison of data from the main group and the experienced-management problem teachers was made using data from the first 8 weeks of the school year. Comparisons were made between experimental and control group means for each of the subsamples using t-tests. Results of the comparisons are included in Table 4. Probability levels for each significance test are also listed. Only those variables for which significant or near significant differences were found in the main sample are included. A comparison of the differences obtained for the experienced-management problem sample and the main sample indicates that on most variables there are smaller effects for the former.

Information on implementation of the management recommendations was also obtained from the teachers' responses to the manual questionnaire. On the manual questionnaire teachers were asked to respond on a 5-point scale to two questions about each of the nine manual chapters: "How

much did you read or study the contents of this section," and "How useful did you find the suggestions in this section?" Means from the September and March administrations of the questionnaire for both the main group of teachers and the subsample of experienced teachers with management problems are included in Table 5. Like the main group of teachers, the experienced teachers reported having read and studied and used the first six chapters more than the last three. In addition, means from the March administration tended to be higher than the September means, possibly reflecting the time constraints at the beginning of the school year.

A scan of the standard deviations associated with cell means in the repeated measures analyses of variance indicated a wide range of behaviors by the treatment group of experienced-management problem teachers. As a result, individual means on selected variables from the Component Ratings, Addendum Component Ratings, and Student Engagement Rating instruments were compared (Tables 6 and 7). This analysis suggested that individual teachers were differentially affected by the treatment. When time of year was examined as a within group variable, implementation effects for some teachers appeared to decrease during the year. Two teachers (Teacher A and Teacher B) were rated high on use of most of the suggested behaviors and had high levels of student task engagement and appropriate behavior throughout the observations. Two teachers (Teacher C and Teacher D) were rated high on use of many of the suggested behaviors during the first 8 weeks of school, but were rated substantially lower in the January-February observations. One teacher (Teacher E) showed few consistent patterns of behavior and the other teacher (Teacher F) was apparently unaffected by the treatment.

## Discussion

The results for the experimental and control group comparisons for the experienced-management problem subsample provide no evidence for an effect on the management outcomes (student behavior measures) and only a slight effect on the teachers' behavior. These teachers generally endorsed the management recommendations as strongly as did teachers in the main sample, but the degree of change in behavior reported by this subsample in the interviews was substantially lower than that reported by the main sample. In addition, the subsample of experienced teachers with management problems reported no improvement in their classes compared with previous school years. The only evidence for any treatment impact on the group as a whole is in treatment and control groups differences that are in the same direction as differences seen in the main sample, although they are smaller and not statistically significant.

There are a number of possible reasons why the treatment was not effective for this subsample of experienced-managment problem teachers. First, the subsample is very small, so that the power of statistical tests to detect differences between the groups was weak. Second, the defining characteristics of this group of teachers is not sufficiently clear, and a survey of individual scores of the teachers indicates that this was not a homogeneous group of "poor managers." In fact, several of the teachers evidenced few management problems. Thus, it may be that requests to principals to nominate experienced teachers with management problems were not adequate, and either better specificity in these instructions, or observations during the preceding year might have been a more appropriate procedure for selecting this sample.

Another possible reason for the absence of treatment results is that the presentation mode for the management information was inappropriate for this group of experienced teachers. In a similar study done at the elementary level (Emmer, Sanford, Evertson, Clements, & Martin, Note 4), teachers with from 0 to 12 years experience were trained in the use of classroom management strategies. Significant treatment effects were obtained for teachers with 3 or more years experience as well as for teachers with 0 to 2 years. In the elementary study, however, none of the participants were specifically nominated on the basis of having management problems. Joyce and Showers (1980) have suggested that some teachers may need additional types of training activities, such as personal feedback based on observation or coaching for application in order to show implementation effects. A number of teachers in the JMIS, including several of the experienced teachers with management problems, requested specific feedback on their classes. A mechanism for giving specific feedback to teachers was not, however, included in the design of the study. Fullan and Pomfret (1977) stated that feedback mechanisms should stimulate interaction and help teachers identify problems they are having. Thus, a more personalized, individualized approach might be more successful in providing the support and encouragement that teachers who have a history of management problems need to alter established behavior patterns and to sustain new behaviors in the face of limited initial success. As Teacher C said in her interview, "It is hard to change patterns after 25 years of teaching. . . . I have made good resolutions, and I carry them out, but I fall into the same types of patterns."

In this study, some of the teachers may not have perceived their need for help in classroom management, or they may have assumed that they were already using strategies recommended in the manual. Copeland (Note 8) suggests that teachers must perceive a match between their needs and the research suggestions in order for change in practice to take place. Interview data suggest that teachers admitted getting only a few ideas from the manual, and that most of their rules, procedures, and instructional plans and materials were ones they had used in previous years. Some of these teachers may have believed that the cost of changing their behavior was not balancing the potential return. Doyle and Ponder (1977) point out that this "cost factor would seem to play an important role in the gradual decline which tends to characterize the latter stages of innovation projects" (p. 9). This might have been the case for Teachers C and D who began the year using many of the recommended behaviors but used them less as the year progressed. In their interviews both teachers stated that they had tried at the beginning of the year to be more consistent in enforcing their rules. In addition, Teacher F admitted, "I've been a little too lax. Even though I have had the rules in front of me, I have tended to let things slide until they have gotten really bad."

As suggested by Wood and Thompson (1980), these teachers may have felt defensive after having been recommended by their principals as being someone who would find the materials useful. Three of the teachers admitted that at first they dreaded having an observer in their classrooms. Others mentioned they usually planned a little better when the observer was to be there. Finally the interviews of some teachers suggest they may have accepted their teaching situation as at least

tolerable. They may have viewed their management problems as not so severe as to put their ability to teach in jeopardy; therefore they lowered their expectations and accepted the situation. As an example, Teacher F stated, "I haven't been as pleased as I would have liked to have been in discipline . . . . But overall, I feel like the kids this year have learned and I have been in better control than in some of the years when I was in the other schools."

There are obvious advantages for staff developers to the use of a minimal intervention such as the one used in this study, namely low cost, little time involvement, and practical materials. The success of this treatment with the main sample in the JMIS, relatively inexperienced teachers, is encouraging, but there is no evidence that such a minimal intervention is sufficient for more experienced teachers with management problems. This subsample of teachers apparently needed help in recognizing areas of problems, and they may have needed more specific recommendations for dealing with the problems in their own situations. This would probably be best accomplished by having frequent meetings to discuss progress and problems with the use of the management materials and by the use of a peer observation and consultation system. This might make individual teachers with problems more receptive to information on classroom management and create a supportive, problem-solving environment in which implementation of suggested teaching practices would be more likely to occur.

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Table 1

Repeated Measures Analysis of Variance on Component Rating Variables

| Component Ratings (5-point rating scale) | Means for groups | | | Means for time periods | | | | | Interaction p |
|---|---|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | p | |
| Describes objectives clearly | 3.04 | 2.90 | ns | 3.15 | 3.31 | 3.26 | 2.15 | <.01 | ns |
| Variety of materials | 1.60 | 1.59 | ns | 1.50 | 1.76 | 1.75 | 1.38 | ns | ns |
| Materials are ready | 4.26 | 4.23 | ns | 4.47 | 4.17 | 4.13 | 4.21 | ns | ns |
| Clear directions | 3.65 | 3.39 | ns | 3.30 | 3.61 | 3.73 | 3.44 | ns | ns |
| Waits for attention | 3.30 | 3.35 | ns | 3.52 | 3.47 | 3.38 | 2.95 | .08 | ns |
| Encourages analysis/builds reasoning skills | 2.63 | 2.25 | ns | 2.70 | 2.59 | 2.56 | 1.91 | .06 | ns |
| Assignments and activities for different students | 1.21 | 1.39 | ns | 1.23 | 1.33 | 1.37 | 1.26 | ns | ns |
| Appropriate pacing of lessons | 3.60 | 3.35 | ns | 3.73 | 3.53 | 3.52 | 3.12 | .05 | ns |
| Clear explanations and presentations | 3.71 | 3.23 | ns | 3.66 | 3.70 | 3.36 | 3.16 | .04 | ns |
| Monitors student understanding | 3.33 | 3.11 | ns | 3.51 | 3.35 | 3.26 | 2.75 | .02 | ns |
| Consistently enforces work standards | 3.46 | 3.26 | ns | 3.33 | 3.44 | 3.53 | 3.14 | ns | ns |
| Suitable traffic patterns | 4.37 | 4.06 | ns | 4.20 | 4.24 | 4.31 | 4.11 | ns | ns |
| Efficient administrative routines | 4.26 | 3.96 | ns | 4.00 | 4.27 | 4.19 | 4.00 | ns | ns |

Table 1 (continued)

Repeated Measures Analysis of Variance on Component Rating Variables

| Component Ratings (5-point rating scale) | Means for groups | | | Means for time periods | | | | | Interaction p |
|---|---|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | Weeks Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | p | |
| Appropriate general procedures | 3.75 | 3.39 | ns | 3.81 | 3.80 | 3.45 | 3.23 | .05 | ns |
| Suitable routines for assigning, checking, collecting work | 3.74 | 3.55 | ns | 3.60 | 3.88 | 3.72 | 3.37 | ns | ns |
| Efficient opening and closing routines | 3.35 | 3.23 | ns | 3.26 | 3.63 | 3.32 | 2.95 | ns | ns |
| Student success | 3.90 | 3.68 | ns | 3.84 | 3.91 | 3.87 | 3.53 | ns | ns |
| Student agression | 1.13 | 1.09 | ns | 1.09 | 1.04 | 1.10 | 1.21 | ns | ns |
| Attention spans considered in lesson | 3.45 | 3.27 | ns | 3.52 | 3.66 | 3.30 | 2.96 | .01 | ns |
| Activities related to student interests/backgrounds | 2.45 | 2.15 | ns | 2.64 | 2.40 | 2.25 | 1.91 | .07 | ns |
| Restrictions on student discretionary behaviors | 3.61 | 2.91 | .09 | 3.30 | 3.34 | 3.20 | 3.22 | ns | ns |
| Rewards appropriate performance | 1.71 | 1.57 | ns | 1.99 | 1.78 | 1.51 | 1.28 | .05 | ns |
| Consistency in managing behavior | 3.38 | 3.24 | ns | 3.49 | 3.38 | 3.32 | 3.05 | ns | .03 |
| Effective monitoring | 3.34 | 3.28 | ns | 3.48 | 3.44 | 3.32 | 2.99 | .10 | ns |
| Amount of disruption | 1.69 | 1.61 | ns | 1.79 | 1.43 | 1.56 | 1.82 | .05 | ns |

Table 1 (continued)

Repeated Measures Analysis of Variance on Component Rating Variables

| Component Ratings (5-point rating scale) | Means for groups | | | Means for time periods | | | | | Interaction |
|---|---|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | p | p |
| Source of disruption | 2.45 | 2.29 | ns | 2.36 | 2.02 | 2.35 | 2.74 | ns | ns |
| Cites rules or procedures to stop disruption | 1.80 | 1.36 | ns | 1.81 | 1.56 | 1.81 | 1.13 | ns | ns |
| Uses desist statements to stop disruptions | 3.32 | 3.46 | ns | 2.50 | 3.88 | 3.29 | 3.89 | ns | ns |
| Uses penalties to stop disruptions | 1.70 | 2.04 | ns | 1.17 | 2.21 | 1.88 | 2.24 | ns | ns |
| Amount of inappropriate behavior | 2.72 | 2.68 | ns | 2.52 | 2.45 | 2.83 | 2.99 | ns | ns |
| Source of inappropriate behavior | 3.15 | 3.06 | ns | 2.82 | 3.04 | 3.19 | 3.36 | ns | ns |
| Stops inappropriate behavior quickly | 3.48 | 3.26 | ns | 3.48 | 3.41 | 3.53 | 3.06 | ns | ns |
| Cites rules or procedures to stop inappropriate behavior | 2.45 | 1.66 | .10 | 2.76 | 2.04 | 1.88 | 1.55 | <.01 | ns |
| Uses desist statement to stop inappropriate behavior | 3.15 | 2.78 | ns | 2.45 | 2.97 | 3.28 | 3.16 | .05 | ns |
| Criticizes to stop inappropriate behavior | 1.14 | 1.31 | ns | 1.08 | 1.12 | 1.34 | 1.36 | .04 | ns |
| Uses penalties to stop inappropriate behavior | 1.55 | 1.49 | ns | 1.22 | 1.48 | 1.79 | 1.60 | ns | ns |

Table 1 (continued)

Repeated Measures Analysis of Variance on Component Rating Variables

| Component Ratings (5-point rating scale) | Means for groups | | | Means for time periods | | | | | Interaction |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Weeks | | | | |
| | Treatment (n = 6) | Control (n = 5) | p | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | p | p |
| Ignores inappropriate behavior | 2.35 | 2.55 | ns | 2.11 | 2.39 | 2.51 | 2.80 | .04 | ns |
| Conveys value of curriculum | 2.58 | 2.49 | ns | 3.02 | 2.70 | 2.44 | 1.99 | .02 | ns |
| Students have task-oriented focus | 3.25 | 3.20 | ns | 3.44 | 3.33 | 3.14 | 3.01 | ns | ns |
| Class has relaxed, pleasant atmosphere | 3.59 | 3.47 | ns | 3.38 | 3.61 | 3.55 | 3.59 | ns | ns |
| Teacher has distracting mannerisms | 1.12 | 1.68 | ns | 1.58 | 1.38 | 1.27 | 1.36 | ns | ns |
| Teacher displays listening skills | 3.34 | 3.00 | ns | 3.50 | 3.23 | 3.13 | 2.82 | .03 | ns |
| Manages interruptions | 3.99 | 4.18 | ns | 4.27 | 4.26 | 3.91 | 3.89 | ns | ns |
| Avoidance behavior during seatwork | 2.06 | 2.22 | ns | 1.85 | 2.04 | 2.22 | 2.44 | .06 | ns |
| Participation in discussion/ recitation | 2.90 | 3.16 | ns | 3.26 | 3.01 | 2.86 | 2.99 | ns | ns |

Table 2

Repeated Measures Analysis of Variance on Observer Ratings of Teacher Variables

| Obser Ratings (5-point rating scale) | Means for groups | | | Means for Time Periods | | | Interaction |
|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | After Week 8 | After February | p | p |
| Readiness of class for remainder of year | 3.47 | 3.43 | ns | 3.72 | 3.18 | .01 | ns |
| Teacher lets class get out of hand with half or more pupils off task | 2.17 | 2.30 | ns | 2.03 | 2.43 | .06 | .06 |
| Frequency of wandering that is not task related | 1.89 | 2.37 | ns | 1.90 | 2.35 | .05 | ns |
| Noise level of classroom in general | 2.44 | 2.88 | ns | 2.67 | 2.66 | ns | ns |
| Teacher's expectation regarding talk among students during seatwork | 2.47 | 2.82 | ns | 2.69 | 2.60 | ns | ns |
| Efficiency of transitions between activities or formats | 3.61 | 3.50 | ns | 3.80 | 3.31 | .02 | ns |
| Frequency of come-ups while teacher is engaged with other students | 2.03 | 2.35 | ns | 1.94 | 2.43 | ns | ns |
| Frequency with which students: | | | | | | | |
| Approach teacher when need help | 2.70 | 3.20 | ns | 2.77 | 3.13 | ns | ns |
| Raise hands when need help from teacher | 3.50 | 3.32 | ns | 3.46 | 3.36 | ns | ns |

Table 2 (continued)

Repeated Measures Analysis of Variance on Observer Ratings of Teacher Variables

| Obser Ratings (5-point rating scale) | Means for groups | | | Means for Time Periods | | | Interaction |
|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | After Week 8 | After February | p | p |
| Call out when need help from teacher | 3.11 | 2.77 | ns | 2.76 | 3.12 | ns | ns |
| How well the teacher handles disruptions | 3.71 | 3.52 | ns | 3.83 | 3.39 | .08 | ns |
| Efficient use of available classroom space | 3.76 | 3.27 | ns | 3.47 | 3.56 | ns | ns |
| Teacher consistently plans enough work for students | 4.10 | 3.88 | ns | 3.98 | 4.00 | ns | ns |
| Teacher allows activities to continue too long | 2.04 | 2.48 | ns | 2.10 | 2.43 | ns | ns |
| Typical assignments are too short or easy | 1.88 | 2.03 | ns | 1.86 | 2.05 | ns | ns |
| When giving instructions, teacher questions to determine student understanding | 2.54 | 2.53 | ns | 2.59 | 2.48 | ns | ns |
| Teacher was successful in holding students accountable for work | 3.64 | 3.43 | ns | 3.75 | 3.23 | .10 | ns |
| Effective routines for communicating assignments | 3.82 | 3.82 | ns | 4.18 | 3.46 | <.01 | ns |
| Frequency of academic feedback: | | | | | | | |
| Grades on papers | 2.70 | 2.32 | ns | 2.44 | 2.58 | ns | ns |

Table 2 (continued)

Repeated Measures Analysis of Variance on Observer Ratings of Teacher Variables

| Obser Ratings (5-point rating scale) | Means for groups | | | Means for Time Periods | | | Inter-action |
|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | After Week 8 | After February | p | p |
| Paper on bulletin boards | 1.43 | 1.42 | ns | 1.39 | 1.46 | ns | ns |
| Verbal citing of students in front of class | 1.54 | 1.68 | ns | 1.54 | 1.68 | ns | ns |
| Individual conferences with teacher | 1.58 | 1.78 | ns | 1.49 | 1.88 | ns | ns |
| Evaluative comments to class as whole | 2.14 | 2.55 | ns | 2.29 | 2.40 | ns | ns |
| Teacher was confident and relaxed the first weeks of school | 3.57 | 3.52 | ns | 3.63 | 3.46 | ns | ns |
| Teacher was warm and pleasant toward the children | 3.63 | 3.18 | ns | 3.43 | 3.38 | ns | ns |
| Teacher was enthusiastic | 3.19 | 2.77 | ns | 3.17 | 2.79 | .08 | ns |
| Showmanship of teacher | 2.35 | 2.20 | ns | 2.15 | 2.40 | ns | ns |

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Table 3

Repeated Measures Analysis of Variance of Student Engagement Ratings

| Component Ratings (5-point rating scale) | Means for groups | | | Means for time periods | | | | | Interaction p |
|---|---|---|---|---|---|---|---|---|---|
| | Treatment (n = 6) | Control (n = 5) | p | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | p | |
| Average success rating | 3.98 | 3.81 | ns | 3.81 | 4.07 | 3.96 | 3.75 | ns | ns |
| Definitely on task, academic | .50 | .51 | ns | .37 | .54 | .56 | .57 | <.01 | ns |
| Definitely on task, procedural | .29 | .27 | ns | .43 | .26 | .24 | .19 | <.01 | ns |
| Off task, sanctioned | .04 | .02 | ns | .04 | .03 | .03 | .01 | ns | ns |
| Off task, unsanctioned | .08 | .06 | ns | .03 | .05 | .08 | .12 | <.01 | ns |
| Dead time | .02 | .04 | ns | .03 | .03 | .02 | .03 | ns | ns |
| On task, academic | .55 | .57 | ns | .40 | .59 | .61 | .63 | <.01 | ns |
| On task, procedural | .32 | .31 | ns | .50 | .29 | .26 | .20 | <.01 | ns |
| On task | .86 | .88 | ns | .90 | .88 | .87 | .83 | ns | ns |

Table 4

Comparison of Experimental and Control Group Mean Differences

for the Main Sample and the Experienced-Management Problem Subsample

| | More Experienced | | Main Sample | |
|---|---|---|---|---|
| Variable (Sig. for Less Exp. Ts) | Difference between T & C | p | Difference between T & C | p |
| **SERs** | | | | |
| Average Success Rating % | .12 | .67 | .27 | .14 |
| Dead Time % | .02 | .13 | .01 | .08 |
| On Task % | -.02 | .69 | .06 | .01 |
| Off-Unsanctioned % | .00 | 1.00 | .02 | .04 |
| **CRs** | | | | |
| Waits for Attention | .03 | .95 | .54 | .02 |
| Appropriate Pacing of Lessons | .24 | .49 | .27 | .11 |
| Monitors Student Understanding | .13 | .72 | .53 | <.01 |
| Consistently Enforces Work Standards | .25 | .56 | .56 | .01 |
| Efficient Administrative Routines | .24 | .51 | .39 | .01 |
| Appropriate General Procedures | .37 | .48 | .45 | .03 |
| Routines for Assigning, Checking & Collecting Work | .10 | .75 | .34 | .02 |
| Efficient Opening & Closing Routines | .03 | .95 | .65 | <.001 |
| Student Aggression | -.02 | .83 | .12 | .03 |
| Restrictions on Discretionary Behavior | .75 | .05 | .70 | <.001 |
| Rewards Appropriate Performance | .16 | .63 | .56 | .03 |
| Consistency in Managing Behavior | .10 | .87 | .56 | .02 |

Table 4 (continued)

| Variable (Sig. for Less Exp. Ts) | More Experienced: Difference between T & C | More Experienced: p | Main Sample: Difference between T & C | Main Sample: p |
|---|---|---|---|---|
| Effective Monitoring | -.01 | .98 | .77 | <.001 |
| Amount of Inaappropriate Behavior | .01 | .99 | .50 | .06 |
| Stops Innappropriate Behavior Quickly | .20 | .72 | .68 | <.01 |
| Cites Rules & Procedures to Stop Inappropriate Behavior | .80 | .16 | .58 | .02 |
| Ignores Inappropriate Behavior | .24 | .61 | .64 | .01 |
| Students Have Task-Oriented Focus | .12 | .80 | .38 | .05 |
| Manages Interruptions | -.14 | .78 | .35 | .04 |
| ORTs | | | | |
| How Ready is Class | .11 | .88 | .67 | .05 |
| How Often Class Gets Out of Hand | -.27 | .74 | .83 | .03 |
| How Often Does Wandering Ocur | .26 | .71 | .71 | .02 |
| General Noise Level of Class | .39 | .62 | .89 | .02 |
| Expectations for Talk During Seatwork | .49 | .26 | .54 | .06 |
| Efficiency of Transitions | .01 | 1.00 | .62 | .03 |
| Frequency of Come-ups While Teacher Engaged | .11 | .85 | .51 | .06 |
| How Often Students Approach Teacher for Help | .26 | .52 | .83 | <.01 |
| How Often Students Raise Hands for Help | .25 | .56 | .60 | .001 |
| How Often Students Call Out for Help | -.26 | .71 | .90 | <.01 |
| How Well Does Teacher Handle Disruption | .00 | 1.00 | .73 | .04 |

Table 4 (continued)

| Variable (Sig. for Less Exp. Ts) | More Experienced Difference between T & C | p | Main Sample Difference between T & C | p |
|---|---|---|---|---|
| Does Teacher Plan Enough Work | .43 | .45 | .75 | .001 |
| Are Assignments Too Short, Easy | .22 | .62 | .45 | .03 |
| Students Held Accountable for Work | .56 | .33 | .58 | .03 |
| Effective Routines for Assignments | .09 | .87 | .63 | .01 |
| NRRs | | | | |
| Consistent Routines for Communicating Assignments | .02 | .97 | .70 | <.01 |
| Effectively Monitors Student Progress | .52 | .17 | .51 | .02 |
| Regular, Efficient Routines for Checking, Grading Assignments | .05 | .92 | .53 | .03 |
| Procedure and Rules Well Taught | .58 | .40 | .76 | <.01 |
| Teacher Follows Thru with Consequences Consistently | .45 | .47 | .96 | .001 |
| Consequences Appropriate, Sufficient, Effective | .08 | .89 | .90 | <.01 |
| Teacher Monitors Beginning of Activities | .13 | .74 | .66 | <.01 |
| Effective Conduct of Transitions | .28 | .63 | .56 | .02 |
| Frequent Problems with Use of Materials in Class | .15 | .72 | .60 | <.01 |
| Problems with Ending Class Procedure | .77 | .23 | .53 | .04 |
| Problems with Student Talk During Whole Class Seatwork | .18 | .75 | .64 | .02 |
| Problems with Students Out-of-Seat During Whole Class Seatwork | .63 | .13 | .84 | <.001 |
| Problems with Completing Work During Whole Class Seatwork | .00 | 1.00 | .64 | .02 |

Table 5*

Treatment Teachers' Responses to the Management Manual Questionnaire

| Manual Section | Read and Studied | | | | Usefulness | | | |
|---|---|---|---|---|---|---|---|---|
| | Fall | | Spring | | Fall | | Spring | |
| | Main Sample | Exper.-Man. Problem | Main Sample | Exper.-Man. Problem | Main Sample | Exper.-Man. Problem | Main Sample | Exper.-Man. Problem |
| Chapter 1 Organizing for the Beginning of School | 3.82 | 3.40 | 4.06 | 4.20 | 3.94 | 3.60 | 3.88 | 4.33 |
| Chapter 2 Developing Rules and Procedures | 4.06 | 4.40 | 4.50 | 4.25 | 4.47 | 4.20 | 4.50 | 4.33 |
| Chapter 3 Student Accountability | 3.65 | 3.00 | 3.94 | 4.00 | 4.06 | 4.00 | 3.88 | 3.83 |
| Chapter 4 Consequences | 3.47 | 3.25 | 3.94 | 4.20 | 3.93 | 3.75 | 3.75 | 4.00 |
| Chapter 5 Planning Activities for the First Week | 3.63 | 3.40 | 4.19 | 3.40 | 3.63 | 3.75 | 4.13 | 3.67 |
| Chapter 6 Maintaining Your Management System | 3.53 | 3.40 | 3.75 | 3.80 | 3.82 | 4.25 | 4.13 | 3.67 |
| Chapter 7 Instructional Clarity | 3.00 | 2.60 | 3.44 | 3.40 | 3.47 | 3.75 | 3.44 | 3.67 |

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Table 5* (continued)

| Manual Section | Read and Studied | | | | Usefulness | | | |
|---|---|---|---|---|---|---|---|---|
| | Fall | | Spring | | Fall | | Spring | |
| | Main Sample | Exper.-Man. Problem | Main Sample | Exper.-Man. Problem | Main Sample | Exper.-Man. Problem | Main Sample | Exper.-Man. Problem |
| Chapter 8 Organizing Instruction | 2.88 | 2.80 | 3.38 | 2.80 | 3.36 | 3.75 | 3.56 | 3.83 |
| Chapter 9 Adjusting Instruction for Special Groups | 2.71 | 3.20 | 3.19 | 3.40 | 3.00 | 3.40 | 3.44 | 3.33 |

The Main Sample is a group of 18 experimental teachers who taught English, math, science, and social studies.

The Experimental Management Problem sample is a group of six more-experienced teachers with management problems.

Table 6

Comparison of Teacher Means on Selected

Component Ratings and Addendum Component Ratings

| Variables | Teacher A | | | | Teacher B | | | |
|---|---|---|---|---|---|---|---|---|
| | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb |
| Chapter 1: Organizing Your Room and Materials for the Beginning of School | | | | | | | | |
| Suitable traffic patterns (CR2a) | 3.67 | 4.00 | 3.86 | 4.63 | 4.50 | 4.60 | 5.00 | 5.00 |
| Chapter 2: Developing a Workable Set or Rules and Procedures | | | | | | | | |
| Efficient administrative routines (CR3a) | 4.00 | 4.80 | 4.86 | 4.88 | 4.75 | 4.80 | 4.60 | 5.00 |
| Appropriate general procedures (CR3b) | 4.33 | 4.40 | 4.86 | 4.75 | 4.25 | 4.40 | 4.00 | 4.43 |
| Efficient opening and closing routines (CR3e) | 3.00 | 4.00 | 4.43 | 4.13 | 3.75 | 4.40 | 3.60 | 3.86 |
| Chapter 3: Student Accountability | | | | | | | | |
| Consistently enforces work standards (CR1k) | 3.67 | 4.20 | 4.71 | 4.38 | 3.75 | 3.80 | 4.40 | 4.57 |
| Suitable routines for assigning, checking, and collecting work (CR3d) | 3.67 | 4.40 | 4.57 | 4.43 | 3.50 | 4.80 | 4.00 | 4.57 |
| Chapter 4: Consequences | | | | | | | | |
| Rewards appropriate behavior (CR5b) | 1.00 | 1.80 | 2.00 | 1.63 | 1.13 | 1.60 | 1.00 | 1.14 |

Note: CR = Component Ratings; ADCR = Addendum Component Ratings

Table 6 (continued)

| Variables | Teacher C | | | | Teacher D | | | |
|---|---|---|---|---|---|---|---|---|
| | Weeks | | | | Weeks | | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| **Chapter 1: Organizing Your Room and Materials for the Beginning of School** | | | | | | | | |
| Suitable traffic patterns (CR2a) | 4.00 | 4.00 | 4.63 | 4.13 | 4.00 | 4.50 | 4.25 | 3.83 |
| **Chapter 2: Developing a Workable Set or Rules and Procedures** | | | | | | | | |
| Efficient administrative routines (CR3a) | 4.00 | 4.00 | 3.38 | 3.25 | 4.75 | 4.83 | 4.63 | 4.17 |
| Appropriate general procedures (CR3b) | 4.00 | 4.17 | 3.38 | 3.00 | 4.50 | 4.00 | 3.14 | 2.67 |
| Efficient opening and closing routines (CR3e) | 4.33 | 4.17 | 2.25 | 2.00 | 4.50 | 4.33 | 3.63 | 3.17 |
| **Chapter 3: Student Accountability** | | | | | | | | |
| Consistently enforces work standards (CR1k) | 3.00 | 3.50 | 3.38 | 2.50 | 4.00 | 4.17 | 3.50 | 2.00 |
| Suitable routines for assigning, checking, and collecting work (CR3d) | 3.67 | 3.50 | 3.88 | 3.25 | 4.25 | 4.33 | 3.75 | 2.67 |
| **Chapter 4: Consequences** | | | | | | | | |
| Rewards appropriate behavior (CR5b) | 2.67 | 2.33 | 2.88 | 1.13 | 3.00 | 1.00 | 1.50 | 1.83 |

Table 6 (continued)

| Variables | Teacher E | | | | Teacher F | | | |
|---|---|---|---|---|---|---|---|---|
| | | Weeks | | | | Weeks | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| Chapter 1: Organizing Your Room and Materials for the Beginning of School | | | | | | | | |
| Suitable traffic patterns (CR2a) | 5.00 | 4.67 | 4.86 | 4.43 | 4.67 | 4.33 | 4.38 | 4.00 |
| Chapter 2: Developing a Workable Set or Rules and Procedures | | | | | | | | |
| Efficient administrative routines (CR3a) | 4.00 | 4.83 | 4.43 | 4.14 | 3.67 | 3.33 | 3.50 | 3.63 |
| Appropriate general procedures (CR3b) | 4.00 | 4.33 | 4.14 | 3.29 | 3.67 | 2.50 | 1.88 | 1.88 |
| Efficient opening and closing routines (CR3e) | 3.33 | 2.50 | 3.14 | 2.71 | 2.00 | 2.33 | 2.50 | 2.38 |
| Chapter 3: Student Accountability | | | | | | | | |
| Consistently enforces work standards (CR1k) | 4.67 | 2.67 | 3.57 | 3.00 | 3.00 | 2.50 | 2.25 | 1.75 |
| Suitable routines for assigning, checking, and collecting work (CR3d) | 4.33 | 3.50 | 3.71 | 3.33 | 3.33 | 2.83 | 2.63 | 2.75 |
| Chapter 4: Consequences | | | | | | | | |
| Rewards appropriate behavior (CR5b) | 3.67 | 2.17 | 1.29 | 1.00 | 1.00 | 1.67 | 1.13 | 1.38 |

Table 6 (continued)

| Variables | Teacher A | | | | Teacher B | | | |
|---|---|---|---|---|---|---|---|---|
| | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb |
| **Chapter 5: Planning Activities for the First Week** | | | | | | | | |
| Teacher presents reviews or discusses rules and procedures (ADCR1) | 3.67 | | | | 3.00 | | | |
| Presentation of rules, procedures, and penalties is clear (ADCR2) | 4.00 | | | | 4.00 | | | |
| Rationale for rules and procedures is explained (ADCR3) | 2.67 | | | | 2.50 | | | |
| Presentation of rules and procedures includes rehearsal or practice (ADCR4) | 2.33 | | | | 1.50 | | | |
| Teacher provides feedback or review of rules and procedures (ADCR5) | 3.33 | | | | 3.50 | | | |
| Teacher stays in charge of all students (ADCR6) | 3.67 | | | | 5.00 | | | |
| **Chapter 6: Maintaining Your Management System** | | | | | | | | |
| Consistency in managing behavior (CR5d) | 4.00 | 4.40 | 4.86 | 4.25 | 4.25 | 4.00 | 4.00 | 4.43 |
| Effective monitoring (CR5e) | 3.67 | 4.60 | 4.71 | 4.63 | 4.00 | 3.80 | 3.80 | 4.29 |
| Stops inappropriate behavior quickly (CR7c) | 4.33 | 4.60 | 4.86 | 4.75 | 3.75 | 4.00 | 4.20 | 4.57 |
| Ignores inappropriate behavior (CR7i) | 2.00 | 1.20 | 1.00 | 1.25 | 1.25 | 2.20 | 1.60 | 1.86 |

Table 6 (continued)

| Variables | Teacher C | | | | Teacher D | | | |
|---|---|---|---|---|---|---|---|---|
| | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb |
| **Chapter 5: Planning Activities for the First Week** | | | | | | | | |
| Teacher presents reviews or discusses rules and procedures (ADCR1) | 1.33 | | | | 3.75 | | | |
| Presentation of rules, procedures, and penalties is clear (ADCR2) | 4.00 | | | | 4.25 | | | |
| Rationale for rules and procedures is explained (ADCR3) | 2.00 | | | | 3.50 | | | |
| Presentation of rules and procedures includes rehearsal or practice (ADCR4) | 1.00 | | | | 1.50 | | | |
| Teacher provides feedback or review of rules and procedures (ADCR5) | 3.33 | | | | 3.75 | | | |
| Teacher stays in charge of all students (ADCR6) | 4.67 | | | | 4.50 | | | |
| **Chapter 6: Maintaining Your Management System** | | | | | | | | |
| Consistency in managing behavior (CR5d) | 4.00 | 2.83 | 2.50 | 2.50 | 4.25 | 3.67 | 2.75 | 2.00 |
| Effective monitoring (CR5e) | 3.00 | 2.67 | 2.50 | 2.13 | 4.00 | 3.50 | 3.13 | 2.17 |
| Stops inappropriate behavior quickly (CR7c) | 4.67 | 3.50 | 2.63 | 2.38 | 4.25 | 4.00 | 3.25 | 1.67 |
| Ignores inappropriate behavior (CR7i) | 1.67 | 2.83 | 2.75 | 3.38 | 1.75 | 2.17 | 3.25 | 3.83 |

Table 6 (continued)

| Variables | Teacher E | | | | Teacher F | | | |
|---|---|---|---|---|---|---|---|---|
| | Weeks | | | | Weeks | | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| **Chapter 5: Planning Activities for the First Week** | | | | | | | | |
| Teacher presents reviews or discusses rules and procedures (ADCR1) | 3.67 | | | | 2.00 | | | |
| Presentation of rules, procedures, and penalties is clear (ADCR2) | 5.00 | | | | 2.00 | | | |
| Rationale for rules and procedures is explained (ADCR3) | 4.67 | | | | 2.00 | | | |
| Presentation of rules and procedures includes rehearsal or practice (ADCR4) | 4.33 | | | | 1.00 | | | |
| Teacher provides feedback or review of rules and procedures (ADCR5) | 4.67 | | | | 2.00 | | | |
| Teacher stays in charge of all students (ADCR6) | 4.33 | | | | 3.33 | | | |
| **Chapter 6: Maintaining Your Management System** | | | | | | | | |
| Consistency in managing behavior (CR5d) | 4.67 | 3.83 | 3.86 | 3.14 | 2.67 | 1.67 | 1.25 | 1.38 |
| Effective monitoring (CR5e) | 3.33 | 3.50 | 3.29 | 3.14 | 3.00 | 2.83 | 2.13 | 2.25 |
| Stops inappropriate behavior quickly (CR7c) | 2.67 | 4.17 | 4.43 | 3.57 | 2.33 | 4.17 | 1.50 | 1.63 |
| Ignores inappropriate behavior (CR7i) | 1.00 | 1.50 | 2.57 | 2.71 | 3.00 | 3.83 | 3.63 | 4.25 |

Table 6 (continued)

| Variables | Teacher A Weeks Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | Teacher B Weeks Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb |
|---|---|---|---|---|---|---|---|---|
| **Chapter 7: Instructional Clarity** | | | | | | | | |
| Describes objectives clearly (CR1a) | 3.33 | 3.60 | 4.14 | 2.63 | 3.75 | 3.40 | 3.20 | 2.57 |
| Clear directions (CR1d) | 3.67 | 4.40 | 4.57 | 4.50 | 3.50 | 3.80 | 3.80 | 4.43 |
| Waits for attention (CR1e) | 4.00 | 4.40 | 4.29 | 4.38 | 4.25 | 3.80 | 3.40 | 3.86 |
| Clear explanations and presentations (CR1i) | 4.50 | 5.00 | 4.00 | 4.60 | 4.67 | 4.25 | 4.33 | 4.43 |
| Monitors student understanding (CR1j) | 3.33 | 3.20 | 4.57 | 3.00 | 3.75 | 3.60 | 3.00 | 4.14 |
| **Chapter 8: Organizing Instruction** | | | | | | | | |
| Materials are ready (CR1c) | 4.00 | 4.40 | 4.57 | 4.75 | 5.00 | 4.40 | 4.20 | 5.00 |
| Appropriate pacing of lessons (CR1h) | 4.00 | 4.40 | 4.14 | 3.88 | 4.25 | 3.80 | 3.80 | 4.14 |
| Attention spans considered in lesson (CR4c) | 4.00 | 3.60 | 3.29 | 2.75 | 3.75 | 4.00 | 4.00 | 4.00 |
| **Chapter 9: Adjusting Instruction for Special Groups** | | | | | | | | |
| Student success (CR4a) | 4.67 | 3.80 | 3.86 | 4.75 | 4.00 | 4.00 | 3.80 | 3.71 |
| Different assignments and activities for different students (CR1g) | 1.00 | 1.20 | 1.57 | 1.63 | 1.00 | 1.80 | 1.20 | 1.00 |

Table 6 (continued)

| Variables | Teacher C | | | | Teacher D | | | |
|---|---|---|---|---|---|---|---|---|
| | Weeks | | | | Weeks | | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| **Chapter 7: Instructional Clarity** | | | | | | | | |
| Describes objectives clearly (CR1a) | 3.00 | 3.33 | 3.38 | 2.00 | 4.00 | 3.67 | 2.38 | 3.00 |
| Clear directions (CR1d) | 3.67 | 3.00 | 3.13 | 3.38 | 4.25 | 4.33 | 3.63 | 2.83 |
| Waits for attention (CR1e) | 3.00 | 3.33 | 3.50 | 2.50 | 4.75 | 4.17 | 2.25 | 2.17 |
| Clear explanations and presentations (CR1i) | 4.00 | 4.00 | 3.25 | 2.67 | 4.25 | 3.83 | 3.75 | 3.67 |
| Monitors student understanding (CR1j) | 3.67 | 4.00 | 3.38 | 3.00 | 4.25 | 3.67 | 2.75 | 2.50 |
| **Chapter 8: Organizing Instruction** | | | | | | | | |
| Materials are ready (CR1c) | 4.00 | 3.50 | 3.38 | 3.00 | 4.50 | 4.50 | 4.75 | 4.67 |
| Appropriate pacing of lessons (CR1h) | 4.33 | 3.17 | 4.00 | 2.38 | 4.00 | 3.83 | 3.50 | 2.67 |
| Attention spans considered in lesson (CR4c) | 4.67 | 3.83 | 3.50 | 2.75 | 4.00 | 4.00 | 3.13 | 3.50 |
| **Chapter 9: Adjusting Instruction for Special Groups** | | | | | | | | |
| Student success (CR4a) | 4.33 | 3.67 | 4.00 | 3.50 | 4.50 | 4.83 | 4.25 | 3.50 |
| Different assignments and activities for different students (CR1g) | 1.00 | 1.00 | 1.13 | 1.13 | 1.75 | 1.17 | 1.38 | 1.50 |

Table 6 (continued)

| Variables | Teacher E | | | | Teacher F | | | |
|---|---|---|---|---|---|---|---|---|
| | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb | Week 1 | Weeks 2 to 4 | Weeks 5 to 8 | Jan-Feb |
| **Chapter 7: Instructional Clarity** | | | | | | | | |
| Describes objectives clearly (CR1a) | 3.67 | 2.83 | 3.71 | 1.57 | 3.00 | 2.67 | 2.50 | 1.63 |
| Clear directions (CR1d) | 3.33 | 3.83 | 3.71 | 3.00 | 3.33 | 3.33 | 3.38 | 2.75 |
| Waits for attention (CR1e) | 3.67 | 4.50 | 3.86 | 2.43 | 1.67 | 1.83 | 2.00 | 1.25 |
| Clear explanations and presentations (CR1i) | 3.00 | 3.33 | 3.20 | 3.00 | 3.50 | 3.00 | 2.57 | 2.20 |
| Monitors student understanding (CR1j) | 3.67 | 3.17 | 3.14 | 2.14 | 3.67 | 3.00 | 2.50 | 2.75 |
| **Chapter 8: Organizing Instruction** | | | | | | | | |
| Materials are ready (CR1c) | 4.67 | 4.33 | 4.43 | 4.33 | 5.00 | 3.50 | 3.63 | 3.75 |
| Appropriate pacing of lessons (CR1h) | 3.67 | 3.83 | 3.71 | 3.33 | 3.67 | 2.67 | 2.50 | 2.75 |
| Attention spans considered in lesson (CR4c) | 2.67 | 3.33 | 3.43 | 2.71 | 3.00 | 3.17 | 2.86 | 2.75 |
| **Chapter 9: Adjusting Instruction for Special Groups** | | | | | | | | |
| Student success (CR4a) | 3.67 | 4.17 | 4.43 | 3.57 | 3.33 | 2.83 | 3.25 | 3.13 |
| Different assignments and activities for different students (CR1g) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.25 | 1.25 |

Table 7

Comparison of Teacher Means on

Classroom Management Variables

| Variables | Teacher A | | | | Teacher B | | | |
|---|---|---|---|---|---|---|---|---|
| | Weeks | | | | Weeks | | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| Component Rating Variables (5-point scale) | | | | | | | | |
| Disruptive behavior | 2.33 | 1.00 | 1.00 | 1.13 | 1.50 | 1.00 | 1.00 | 1.14 |
| Inappropriate behavior | 3.00 | 2.00 | 1.86 | 1.25 | 1.50 | 1.60 | 1.60 | 2.00 |
| Student task-orientation | 3.33 | 4.20 | 4.29 | 3.75 | 5.00 | 3.20 | 4.00 | 3.57 |
| Student Engagement Variables | | | | | | | | |
| Percent of students off-task, unsanctioned | 1.3 | 1.2 | 1.7 | 1.6 | 0.2 | 0.9 | 1.7 | 1.3 |
| Percent of students on-task | 98.7 | 92.2 | 89.2 | 89.6 | 90.6 | 93.0 | 84.4 | 93.9 |

Table 7 (continued)

| Variables | Teacher C | | | | Teacher D | | | |
|---|---|---|---|---|---|---|---|---|
| | Weeks | | | | Weeks | | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| **Component Rating Variables (5-point scale)** | | | | | | | | |
| Disruptive behavior | 1.33 | 1.33 | 1.13 | 1.88 | 1.00 | 1.17 | 1.38 | 2.17 |
| Inappropriate behavior | 1.67 | 2.33 | 2.88 | 3.63 | 1.75 | 2.00 | 3.88 | 4.17 |
| Student task-orientation | 3.33 | 3.67 | 3.75 | 2.88 | 4.00 | 3.67 | 2.63 | 2.50 |
| **Student Engagement Variables** | | | | | | | | |
| Percent of students off-task, unsanctioned | 0.2 | 0.6 | 3.0 | 19.7 | 2.0 | 8.6 | 13.5 | 16.8 |
| Percent of students on-task | 99.8 | 97.1 | 95.7 | 79.2 | 78.5 | 85.8 | 86.0 | 82.4 |

Table 7 (continued)

| Variables | Teacher E | | | | Teacher F | | | |
|---|---|---|---|---|---|---|---|---|
| | Weeks | | | | Weeks | | | |
| | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb | Week 1 | 2 to 4 | 5 to 8 | Jan-Feb |
| **Component Rating Variables (5-point scale)** | | | | | | | | |
| Disruptive behavior | 1.00 | 1.33 | 1.14 | 1.29 | 3.67 | 3.33 | 3.75 | 3.63 |
| Inappropriate behavior | 3.33 | 1.83 | 2.43 | 2.57 | 4.00 | 1.83 | 4.50 | 4.75 |
| Student task-orientation | 3.33 | 3.33 | 3.14 | 3.00 | 2.67 | 1.67 | 1.50 | 1.63 |
| **Student Engagement Variables** | | | | | | | | |
| Percent of students off-task, unsanctioned | 0.0 | 0.4 | 2.7 | 8.5 | 3.8 | 24.5 | 26.6 | 41.1 |
| Percent of students on-task | 82.3 | 78.7 | 90.7 | 83.5 | 96.2 | 74.3 | 70.7 | 57.6 |